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**Alternative
Silicone Gel Sheeting
Application Methods to
Improve Burn Scar Outcome**

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Alternative Silicone Gel Sheeting Application Methods to Improve Burn Scar Outcome.¹

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The use of silicone as an adjunct modality in control of hypertrophic scarring has been an accepted therapeutic technique over the past decade. Reported benefits of silicone include reduced length of time to achieve scar maturation, minimizing hypertrophic scar formation, flattening established hypertrophic scars, and decreased scar contractures with resulting increased range of motion when compared to the joints treated without silicone.

Silicone gel sheeting (SGS) has a variety of adapted application techniques from being applied. Silicone bonded materials now range from fabric materials, such as temporary and permanent pressure garments through high temperature clear plastic facemask material. Application of un-bonded SGS has had demonstrated problems with maintaining position, contact with concave areas, and poor durability causing a short lifespan. Alternative methods of combining patented, self-adhesive SGS bonded with compressive foam and/or fabric (Oleeva[®]), silicone elastomer sheeting (Silon- SES[®]) silicone textile insert material (Silon-TEX[®]) and silicone bonded, low temperature splinting material (Silon-LTS[®]) increase conformity in concave areas, assist in maintaining desired position, are readily modifiable and significantly increase durability.

Clinical trials with the use of a silicone bonded to a low temperature thermoplastic splinting material (Silon-LTS[®]) with properties similar to Aquaplast[®] expands the therapeutic use of SGS in new splinting and face mask techniques. Conformers for prefabricated and custom mouth splints of this low temperature thermoplastic splinting material decrease oral commissure contracture and have the additional benefit of increased comfort secondary to the SGS lining. This material provides alternatives for conforming pressure to use under gradient pressure masks, plus the ease of fabrication. The translucent property of this silicone bonded low temperature splinting material during the molding process provides direct visualization of the scar providing the clinician with direct scar treatment and measurement. Facial conformers molded on the patient do not require the negative and positive mold process therefore decreasing both significant time and expense. Enhanced silicone conformity, durability and greatly improved burn scar outcomes can be achieved merging established treatment techniques with these emerging silicone material technologies as part of an effective rehabilitation practice.

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